

50C

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/511,616
Source: PG110
Date Processed by STIC: 1/5/06

ENTERED



PCT

RAW SEQUENCE LISTING DATE: 01/05/2006
PATENT APPLICATION: US/10/511,616 **TIME:** 11:16:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\01052006\J511616.raw

RAW SEQUENCE LISTING

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Input Set : A:\PTO.RJ.txt

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68	gcgagctcat ttgccgctgc tggtc	25
71	<210> SEQ ID NO: 5	
72	<211> LENGTH: 25	
73	<212> TYPE: DNA	
74	<213> ORGANISM: Artificial Sequence	
76	<220> FEATURE:	
77	<223> OTHER INFORMATION: Synthetic oligonucleotide	
79	<400> SEQUENCE: 5	
80	gggttacctg gcaacttcc ggcgg	25
83	<210> SEQ ID NO: 6	
84	<211> LENGTH: 25	
85	<212> TYPE: DNA	
86	<213> ORGANISM: Artificial Sequence	
88	<220> FEATURE:	
89	<223> OTHER INFORMATION: Synthetic oligonucleotide	
91	<400> SEQUENCE: 6	
92	ccgaattcct tttatgacgc cggac	25
95	<210> SEQ ID NO: 7	
96	<211> LENGTH: 25	
97	<212> TYPE: DNA	
98	<213> ORGANISM: Artificial Sequence	
100	<220> FEATURE:	
101	<223> OTHER INFORMATION: Synthetic oligonucleotide	
103	<400> SEQUENCE: 7	
104	ccgaattctt atgattaagg aggca	25
107	<210> SEQ ID NO: 8	
108	<211> LENGTH: 25	
109	<212> TYPE: DNA	
110	<213> ORGANISM: Artificial Sequence	
112	<220> FEATURE:	
113	<223> OTHER INFORMATION: Synthetic oligonucleotide	
115	<400> SEQUENCE: 8	
116	gcgagctcgat gatatagttc gcata	25
119	<210> SEQ ID NO: 9	
120	<211> LENGTH: 29	
121	<212> TYPE: DNA	
122	<213> ORGANISM: Artificial Sequence	
124	<220> FEATURE:	
125	<223> OTHER INFORMATION: Synthetic oligonucleotide	
127	<400> SEQUENCE: 9	
128	ggcgatccat gtcatctaatt gagcgaaat	29
131	<210> SEQ ID NO: 10	
132	<211> LENGTH: 29	
133	<212> TYPE: DNA	
134	<213> ORGANISM: Artificial Sequence	
136	<220> FEATURE:	
137	<223> OTHER INFORMATION: Synthetic oligonucleotide	
139	<400> SEQUENCE: 10	
140	gccgaattca agtaacgata cctacaggg	29

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143 <210> SEQ ID NO: 11
 144 <211> LENGTH: 29
 145 <212> TYPE: DNA
 146 <213> ORGANISM: Artificial Sequence
 148 <220> FEATURE:
 149 <223> OTHER INFORMATION: Synthetic oligonucleotide
 151 <400> SEQUENCE: 11
 152 cgcgaaattca tcctacacgg caggtgaat 29
 155 <210> SEQ ID NO: 12
 156 <211> LENGTH: 29
 157 <212> TYPE: DNA
 158 <213> ORGANISM: Artificial Sequence
 160 <220> FEATURE:
 161 <223> OTHER INFORMATION: Synthetic oligonucleotide
 163 <400> SEQUENCE: 12
 164 ccgaagctt cactgcaacc atgaatgac 29
 167 <210> SEQ ID NO: 13
 168 <211> LENGTH: 30
 169 <212> TYPE: DNA
 170 <213> ORGANISM: Artificial Sequence
 172 <220> FEATURE:
 173 <223> OTHER INFORMATION: Synthetic oligonucleotide
 175 <400> SEQUENCE: 13
 176 cgggatccgt tatcgcaat ctggaggcaa 30
 179 <210> SEQ ID NO: 14
 180 <211> LENGTH: 30
 181 <212> TYPE: DNA
 182 <213> ORGANISM: Artificial Sequence
 184 <220> FEATURE:
 185 <223> OTHER INFORMATION: Synthetic oligonucleotide
 187 <400> SEQUENCE: 14
 188 catgcattca ggcaggttca ggtacggta 30
 191 <210> SEQ ID NO: 15
 192 <211> LENGTH: 27
 193 <212> TYPE: DNA
 194 <213> ORGANISM: Artificial Sequence
 196 <220> FEATURE:
 197 <223> OTHER INFORMATION: Synthetic oligonucleotide
 199 <400> SEQUENCE: 15
 200 ggggtaccta atcaacacta acagtct 27
 203 <210> SEQ ID NO: 16
 204 <211> LENGTH: 27
 205 <212> TYPE: DNA
 206 <213> ORGANISM: Artificial Sequence
 208 <220> FEATURE:
 209 <223> OTHER INFORMATION: Synthetic oligonucleotide
 211 <400> SEQUENCE: 16
 212 ccgaattcag cagactgaac cgccagt 27
 215 <210> SEQ ID NO: 17

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217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
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221 <223> OTHER INFORMATION: Synthetic oligonucleotide
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224 ccgaattcgg ggctttca t 21
227 <210> SEQ ID NO: 18
228 <211> LENGTH: 27
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Synthetic oligonucleotide
235 <400> SEQUENCE: 18
236 gcgagcttcaagaattgc cagagac 27
239 <210> SEQ ID NO: 19
240 <211> LENGTH: 230
241 <212> TYPE: PRT
242 <213> ORGANISM: Streptococcus pneumoniae
244 <400> SEQUENCE: 19
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247 1 5 10 15
250 Lys Glu Ala Thr Gln Arg Lys Asp Glu Ala Glu Ala Ala Phe Ala Thr
251 20 25 30
254 Ile Arg Thr Thr Ile Val Val Pro Glu Pro Ser Glu Leu Ala Glu Thr
255 35 40 45
258 Lys Lys Lys Ala Glu Glu Ala Thr Lys Glu Ala Glu Val Ala Lys Lys
259 50 55 60
262 Lys Ser Glu Glu Ala Ala Lys Glu Val Glu Val Glu Lys Asn Lys Ile
263 65 70 75 80
266 Leu Glu Gln Asp Ala Glu Asn Glu Lys Lys Ile Asp Val Leu Gln Asn
267 85 90 95
270 Lys Val Ala Asp Leu Glu Lys Gly Ile Ala Pro Tyr Gln Asn Glu Val
271 100 105 110
274 Ala Glu Leu Asn Lys Glu Ile Ala Arg Leu Gln Ser Asp Leu Lys Asp
275 115 120 125
278 Ala Glu Glu Asn Asn Val Glu Asp Tyr Ile Lys Glu Gly Leu Glu Gln
279 130 135 140
282 Ala Ile Thr Asn Lys Lys Ala Glu Leu Ala Thr Thr Gln Gln Asn Ile
283 145 150 155 160
286 Asp Lys Thr Gln Lys Asp Leu Glu Asp Ala Glu Leu Glu Leu Glu Lys
287 165 170 175
290 Val Leu Ala Thr Leu Asp Pro Glu Gly Lys Thr Gln Asp Glu Leu Asp
291 180 185 190
294 Lys Glu Ala Ala Glu Ala Glu Leu Asn Glu Lys Val Glu Ala Leu Gln
295 195 200 205
298 Asn Gln Val Ala Glu Leu Glu Glu Leu Ser Lys Leu Glu Asp Asn
299 210 215 220
302 Leu Lys Asp Ala Glu Thr

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303 225 230
 306 <210> SEQ ID NO: 20
 307 <211> LENGTH: 257
 308 <212> TYPE: PRT
 309 <213> ORGANISM: Streptococcus pneumoniae
 311 <400> SEQUENCE: 20
 313 Leu Gln Ser Pro Val Ala Ser Gln Ser Lys Ala Glu Lys Asp Tyr Asp
 314 1 5 10 15
 317 Ala Ala Lys Lys Asp Ala Lys Asn Ala Lys Lys Ala Val Glu Asp Ala
 318 20 25 30
 321 Gln Lys Ala Leu Asp Asp Ala Lys Ala Ala Gln Lys Lys Tyr Asp Glu
 322 35 40 45
 325 Asp Gln Lys Lys Thr Glu Glu Lys Ala Ala Leu Glu Lys Ala Ala Ser
 326 50 55 60
 329 Glu Glu Met Asp Lys Ala Val Ala Ala Val Gln Gln Ala Tyr Leu Ala
 330 65 70 75 80
 333 Tyr Gln Gln Ala Thr Asp Lys Ala Ala Lys Asp Ala Ala Asp Lys Met
 334 85 90 95
 337 Ile Asp Glu Ala Lys Lys Arg Glu Glu Ala Lys Thr Lys Phe Asn
 338 100 105 110
 341 Thr Val Arg Ala Met Val Val Pro Glu Pro Glu Gln Leu Ala Glu Thr
 342 115 120 125
 345 Lys Lys Lys Ser Glu Glu Ala Lys Gln Lys Ala Pro Glu Leu Thr Lys
 346 130 135 140
 349 Lys Leu Glu Glu Ala Lys Ala Lys Leu Glu Glu Ala Glu Lys Lys Ala
 350 145 150 155 160
 353 Thr Glu Ala Lys Gln Lys Val Asp Ala Glu Glu Val Ala Pro Gln Ala
 354 165 170 175
 357 Lys Ile Ala Glu Leu Glu Asn Gln Val His Arg Leu Glu Gln Glu Leu
 358 180 185 190
 361 Lys Glu Ile Asp Glu Ser Glu Ser Glu Asp Tyr Ala Lys Glu Gly Phe
 362 195 200 205
 365 Arg Ala Pro Leu Gln Ser Lys Leu Asp Ala Lys Lys Ala Lys Leu Ser
 366 210 215 220
 369 Lys Leu Glu Glu Leu Ser Asp Lys Ile Asp Glu Leu Asp Ala Glu Ile
 370 225 230 235 240
 373 Ala Lys Leu Glu Asp Gln Leu Lys Ala Ala Glu Glu Asn Asn Asn Val
 374 245 250 255
 377 Glu
 381 <210> SEQ ID NO: 21
 382 <211> LENGTH: 487
 383 <212> TYPE: PRT
 384 <213> ORGANISM: Streptococcus pneumoniae
 386 <400> SEQUENCE: 21
 388 Leu Gln Ala Ser Asn Glu Ser Gln Arg Lys Glu Ala Asp Lys Lys Ile
 389 1 5 10 15
 392 Lys Glu Ala Thr Gln Arg Lys Asp Glu Ala Glu Ala Ala Phe Ala Thr
 393 20 25 30
 396 Ile Arg Thr Thr Ile Val Val Pro Glu Pro Ser Glu Leu Ala Glu Thr

VERIFICATION SUMMARY

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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date